

DISFIGUREMENT OF THE NATIONAL GALLERY.

AN abominable tin smoke-pipe has recently been placed in the centre of the east end of this unlucky building, immediately over the head of the sitting figure. The steel that before formed the termination at the apex is made into a square stone box, probably to comply with the "Buildings Act," which requires tubes above 4 feet high to be fixed 2 feet into brick or stone-work, and from this rises the ugly pipe. It gives all the effect of one of the penny steam-boats, elevated as a sign, with Britannia at the side ruling the waves.

Surely some less objectionable remedy than this, for that disgrace to modern science, a smoky chimney, could be found? If not, the nuisance should be endured within, rather than perpetrate such an enormity as this pipe is, at the head-quarters of the Fine Arts in England.

CHEAPEN AND IMPROVE GAS.

SIR,—I consider you are conferring a great boon to the consumers of gas in drawing attention to the quality of the gas they are at present supplied with, and I trust the period is not far distant when London will be properly lighted. The companies ought to be compelled to use Cannel coal, and then by judicious management the price of gas could immediately be reduced to 5s., or even 4s. This is proved by the fact, that in Liverpool, Cannel coal only is used, which costs about 19s. per ton, from which a small quantity of coke is obtained worth 9s. per ton. The gas produced is about 9,500 cubic feet, of a highly illuminating power; the specific gravity above 700, the price only 5s. per 1,000 cubic feet; and most likely, a still further reduction will be made.

In London "Pelaw or Pelton Main" (the best coal from Newcastle) is used, the cost of which is from 22s. to 24s. per ton. It produces a very large quantity of good coke, which is worth at the present time 22s. per chaldron. The gas obtained is about 9,000 cubic feet of very weak gas, the specific gravity being very little above 300, and its illuminating power is less than one-half that of Cannel coal gas. The price is 7s. per 1,000 cubic feet, and if we may judge from the price of the company's shares, and the amount of their dividends, there is no prospect of a reduction.

This ought to open the eyes of the companies: it is to their interest to increase the use of gas, and this would be the case to an enormous extent if the consumers could introduce it to their private apartments. In urging this to the officers of a London company, he stated that the reason for not using Cannel coal gas in London was, that the meters would not then travel so fast. I think this should have some weight with the consumers, who ought to make the demand to be supplied with gas of a certain illuminating power. Calling upon you to continue your exertions in obtaining this great desideratum,

I am, Sir, &c. Feb. 16th. T. A. H.

PURIFYING GAS.—Mr. H. Phillips, chemist, of Clift Houlton, Devon, has obtained a patent for an improved method of purifying gas. In the purifying of gas by lime, two means are resorted to, called the wet and the dry lime processes; in some works one only of the two processes is used; in other works both processes are used consecutively, and the lime employed for each process (where both are used), is fresh lime. The object of the present invention consists in using for the wet lime process the lime which has been previously used for the dry lime process, by which considerable saving of lime will result. The gas is first passed through the wet lime purifiers: new or fresh lime in the ordinary manner is employed for the dry lime process, and afterwards this lime is used for the wet process, to be immediately mixed with water, in a vat, vessel, or other receiver, to prevent it becoming hard; which lime, by means of additional portions of water, is brought to the proper consistency for the wet lime process in the same manner as if using fresh lime for such purpose; and such mixture of lime is applied in the ordinary apparatus used for the wet lime process.

ARCHITECTS' PROPERTY IN THEIR DESIGNS.

SIR,—Simple occurrences often afford useful and instructive hints, I therefore send you the following short correspondence, that recently took place between a clergyman and an architect, to be dealt with by you as you think fair and due to all classes interested. In a passing conversation between them (they have ever been, and probably still are, on friendly terms, as far as my informant the architect is aware), the architect received the impression, that the clergyman contemplated using a plan furnished by him, the architect, for the erection of a villa on speculation, to C., a working carpenter, whom the clergyman had employed as his builder, and on duly considering the matter, he sent the following note:—

"Rev. Sir,—I was quite unprepared to hear to-day, that you purposed using C.'s plan (viz. I suppose the one I gave him) for your intended house at —, because I was not aware you could be ignorant that it was prepared for that special purpose only, and could be therefore at his disposal for no other than the house he is building for himself. However suitable it may be for that peculiar situation, it would be scarcely so for the unconfined spot on which you propose to build; consequently, if followed in your case, while there will be sufficient in its external appearance to induce a belief that I was consulted, its unsuitableness to the spot may prove injurious to my reputation as an architect. I can have not the least objection to your employing any architect you wish, or even none at all; but you must plainly see that I have good reason to object to my designs being used for any other purpose than that for which they were expressly intended; I trust, therefore, you will do me the justice to obviate the objection in any way most convenient to yourself, and for which I shall feel extremely obliged.—I am, Rev. Sir, yours, &c."

To this the clergyman thus replied:—

"Sir,—I consider myself at liberty to copy the design of any house that pleases my taste. Yet you may be at ease on the subject of your note, since I have not copied yours, nor indeed any one's, but C. is building on plans he has prepared under my direction.—I am, Sir, &c."

Some might have thought proper to reply to this last, but the architect thought otherwise, and so there it ended.—I am, Sir, &c. Feb. 16th. A. 45.

THE BEST SIZED PIPE TO THROW WATER.

SIR,—I beg leave to transmit for insertion (if you think fit) in your valuable journal, the result of some experiments made by Mr. Brunel at Bath, when employed by the Duke of Devonshire in making some improvements in the fountains at Chatsworth. The experiments were tried for the purpose of ascertaining what sized pipe would give a jet of the greatest altitude. The screw-pipe was attached to the main that comes from the castle reservoir. By the annexed it is demonstrated that a bore $\frac{1}{4}$ of an inch in diameter throws the water the highest.

This may be interesting to persons concerned in the operation of fire engines.

I am, Sir, yours, &c.

AN ORIGINAL SUBSCRIBER.
Kensington Gore, Feb. 19th, 1846.

With a pressure of 175 feet of water, the jet rose to the under-stated height through a hand pipe, with a nozzle of varied sizes:—

Diameter of pipe in inches.	Height of jet.
$\frac{1}{4}$	65 feet 5 inches
$\frac{1}{2}$	91 " 2 "
$\frac{3}{4}$	195 " 6 "
1	92 " 0 "
$1\frac{1}{4}$	94 " 0 "
$1\frac{1}{2}$	89 " 0 "

The Wesleyan College School at Bath, near Bridgewater, is fast approaching completion. Bath and Knapp stone is used in the structure.

BRITISH ARCHÆOLOGICAL ASSOCIATION.

FIG. 18. The treasurer in the chair.—A report was read from Mr. Lower, who is still indefatigably engaged in watching the excavations on the site of Lewes Priory, in which he mentioned the discovery of a marble effigy of a crusader of the thirteenth century, similar to that of Lord De Ros in the Temple Church. It is much mutilated; the head and legs are wanting; the right hand rests upon the breast, while in the left are held a sword and shield; the body is clothed in ring mail, and the legs have evidently been crossed. A leaden seal of Clement VI. was also found.

Mr. John Newnham, F.S.A., exhibited an urn of uncommon form, and curiously ornamented, discovered in excavating for the foundations of the new Houses of Parliament. It is of late Roman workmanship.

Mr. Wright read a letter from Mr. J. W. Huggall, of Cheltenham, accompanying drawings of a very elegant leaden font of the twelfth century, ornamented with figures and scroll-work, preserved in a church in Gloucestershire. The beauty of the font is almost concealed by a thick coating of blue and yellow paint; and Mr. Huggall expressed a wish for information on the best manner of clearing away the paint without danger of injuring the font. Mr. Smith said that Mr. Huggall's object would be most effectually obtained by a solution of quicklime and pearlash. Mr. Isaacson remarked that it was a common thing to find beautiful fonts in country churches entirely covered with paint. He instanced the church of Ewell in Surrey, where, some time ago, the churchwarden, who happened to be a market-gardener, had ordered an elegant stone font of the time of Edward III. to be painted green.

Mr. Artis, F.S.A., laid on the table an elegant bronze casket, ornamented with the Vitruvian scroll and other devices; he stated it did not appear to have been cast, as the marks of the tooling were very evident; also a bronze sceptre, 21 inches in length; both these were found at Castor, Northamptonshire, the ancient Durobriva.

Mr. Gommonde, of Cheltenham, forwarded drawings of some Saxon remains found in a tumulus near Gloucester, mixed with which were some Saxon ware and Roman coins, also a bronze figure of *Bona Dea*; some discussion ensued upon the presence of Roman and Saxon indicia in the same barrow, several instances of which were adduced.

Mr. Chaffers, Jun., communicated some observations, accompanied by extracts from a letter from Mr. Wake Smith, on a very remarkable burrow lately opened at Badbury, in Dorsetshire; it was entirely surrounded by a low wall of uneven masses of stone rudely constructed.

Letters were received from Messrs. Warne and Barnes requesting the intervention of the Association with the railway proprietors, to prevent the spoliation of the Roman amphitheatre, near Dorchester, in Dorsetshire, the line of which was to run directly through the centre, while by the deviation of a few feet, this interesting monument of antiquity might be spared. It was stated that they were there getting up a petition to the railway directors for its preservation. Mr. Sydenham made some observations on this monument, which he characterised as a "unique relic," and to the remarkable character of which, he said, attention was first called by Sir Christopher Wren, who saw it on his way to Portland to obtain stone for the building of St. Paul's Cathedral. As the property belonged to the Crown, as parcel of the possessions of the duchy of Cornwall, he thought that the Government might easily be prevailed upon to interpose and save it. This threatened case of destruction of ancient monuments led to a discussion, in which many members took part, and ended in a strong recommendation to the committee to take the most efficient steps in its power for its preservation.

Other communications were read, but our limits force us to confine ourselves, in noticing the meetings of either the Association or the Institute, to those matters which relate more immediately to architectural antiquities.

The chairman stated that the general yearly meeting of the Association would take place on Wednesday, the 4th of March. The Rev. J. J. Elli, F.S.A., and Dr. Cupland, are appointed auditors of the accounts.